

DRAFT AND PREDECISIONAL – DO NOT RELEASE

- c. Using the PACs as a basis the Service will scale to population and species levels, will focus on those threats identified in the COT as relevant to that population.

7. Threats Assessment

We will assess the degree to which major threats of habitat loss, fragmentation, and inadequacy of regulatory mechanisms have been addressed since 2010. The 2010 finding presented the threats in the classic listing 5-factor analysis. The new analysis will also evaluate all of those factors identified in 2010 as well as any new ones. Our presentation of the results of that analysis may be different than 2010 in light of our work on listing transformation. The approach under listing transformation will be a more holistic and integrated explanation of how the threats act on the species in concert with other threats. The threats in 2010 were identified as the following:

- Present or threatened destruction, modification, or curtailment of habitat or range
 - Fire
 - Prevention
 - Curtailment
 - Restoration
 - Invasive Species
 - Cheatgrass
 - Conifers
 - Other
 - Non-renewable energy habitat loss and fragmentation
 - Renewable energy habitat loss and fragmentation
 - Conversion to agriculture
 - Losses to human infrastructure
- Overuse
- Disease or Predation
 - West Nile
- Inadequacy of existing regulatory mechanisms
 - Federal Agency Plans
 - State Plans
 - Other Conservation Efforts
- Other factors
 - Climate Change
 - Human Population Change

- a. For each of the major threats identified from 2010 (fire risk and invasive grass risk, conifer encroachment, energy development risk, conversion to tilled agriculture risk) and new threats identified as population level stressors we will, through the species report:

- i. Quantify threats to both relative abundance and distribution of sage-grouse by the use of Spatially Explicit Modeling (SEM).

Comment [KNorman7]: It would be good to discuss this section. We want to frame the threats discussion by drivers. We will capture the 5-factors, but it may not be presented in the way it has historically been presented. We envision an integrated analysis rather than a more traditional factor-by-factor, compartmentalized approach.

Comment [TM8]: Added introductory text and left this as is